

Labial-velar to Labial Sound Changes in Luto

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Background

- Luto language
 - Central African Republic and Chad
 - Nilo-Saharan, Sara-Bongo-Bagirmi (SBB)
 - Dialects: **Luto (Rito/Ruto)**, **Nduga**, Nduka, Wada, Konga
 - About 19,000 speakers
 - ISO 639-3: [ndy], *Ethnologue* name: Lutos (Eberhardt, Simons & Fennig 2021)

Nduga dialect

b	d				
(p)	t		k	kp	
(b)	d		g	gb	
(mb)	nd		ŋg	ŋgb	
f	s				(h)
v	z				
mv	nz				
m	n	ɲ			
	r/l				
w		j			

Luto dialect

b	d				
p	t		k		
b	d		g		
mb	nd		ŋg		
f	s				(h)
v	z				
mv	nz				
m	n	ɲ			
	r/l	ɾ			
w		j			

*KP > P (Luto dialect)

a. *kp > p

b. *gb > b

c. *ŋgb > mb

- *KP > P subsumes all three changes
- Cf. Cahill's (2021) crosslinguistic study, this conference

Correspondences

Nduga		Luto
kp	:	p
gb	:	b
ŋgb	:	mb

Sample Cognates

	Nduga	Luto	Gloss
kp : p	[kpā.rù]	[pā.rù]	'poison'
gb : b	[gbā.gū]	[bā.gā]	'wing'
ηgb : mb	[ηgbā.ɾā]	[mbā.ɾā]	'assegai (spear)'

Velar Stops

	Nduga	Luto	Gloss
k : k	[kú.lú]	[kú.lù]	'charcoal'
g : g	[gā.zù]	[gā.zù]	'horn'
ŋg : ŋg	[ŋgā.lā]	[ŋgā.lā]	'heart'

NB: These correspondences are well-established.

Labial stops

	Nduga	Luto	Gloss
p : p	[pà.ɾā]	[pà.ɾā]	‘bile’
b : b	[bá.ndǎ́]	[bá.ndà]	‘net’
mb : mb	—	—	—

NB: These correspondences are rare. Labial stops are rare in Nduga.

Proto-SBB > Nduga, Luto

- a. *p > f
- b. *b > v
- c. *mb > mv

Source: Boyeldieu, Nougayrol &
Palayer (2006)

*P > F

	Proto-SBB	Nduga	Luto	Gloss
*p > f	*p-t-	fítī	fítī, fītī	flower
	*-p-	ūfà	—	cut up
*b > v	*b-l-	vèlé	vèlē	feather
	*d-b-	dóvò	dóvò	path, road
*mb > mv	*mb-y-	mvīyá	mvíyà	beard
	*k-mb-	kámvà	kámvà	leaf

Discussion

- Proto-SBB *P > F (both Nduga & Luto dialects)
- Luto *KP > P (Luto dialect)
- Result:
 - P rare in Nduga
 - KP absent in Luto

Discussion

- *P > F created gap in phonemic inventory of Nduga and Luto: rarity of labial stops.
 - NB: *F absent in Proto-SBB (Boyeldieu 2006)
- Resulting consonant inventory was asymmetric (cf. Pike 1947), i.e. absence/rarity of labial stops.
- *KP > P served to produce a more symmetric and typologically common sound system.

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Thank You!

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